

Work Order ID 157241

Friday, February 17, 2017 1:31:06 PM

157241

Page 1

Item ID: D350-567-031

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Interior Window For -015 & -025

Start Date: 2/23/2017 Start Qty: 1.00

1

Cust Item ID:

Required Date: 3/9/2017 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals:

Process Plan:

DAS
21
9-89

Date: FEB 27 2017

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

Draw Nbr

Revision Nbr

DSI9745-011

A

IIN-D350-567

E

DAS
6
9-89

MAR 20 2017

DAS
21
9-89

1703-20

100

Document Control

0.00

100

DOCUMENT CONTROL

DC

Memo

0.00

Doc.Control -USB or Paperwork

Photocopy blue file and create labels per PPP D350-567-031 chg002

DAS
27
9-89

MAR 22 2017

110

Packaging

0.00

110

Packaging

Memo

0.00

Packaging

Pick Packing Kit

DAS
6
9-89

MAR 21 2017

DAS
28
9-89

ENSURE DT 8439 TEMPLATE IS INCLUDED

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
3042 15 10/10				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐		OTHER : ☐	

Work Order ID 157241

Friday, February 17, 2017 1:31:06 PM

157241

Page 2

Item ID: D350-567-031

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Interior Window For -015 & -025

Start Date: 2/23/2017 Start Qty: 1.00

1

Cust Item ID:

Required Date: 3/9/2017 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals:

Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run Start

NR1

QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop

NR2Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

120

QC4- 100% Inspect kits for completeness

0.00

120

QC

Memo

0.00

Quality Control

DAS
27
9-89

MAR 2 7 2017

130

Packaging

0.00

130

Packaging

Memo

0.00

Packaging

Identify and pack for shipping as per PPP D350-567-031

Location: _____

PPP Rev: _____

fg 031

DAS
27
9-89

MAR 2 2 2017

140

QC21- Final Inspection - Work Order Release

0.00

140

QC

Memo

0.02

Quality Control

DAS
21
9-89

MAR 2 2 2017

DAS
21
9-89
MAR 2 2 2017

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation			Disposition		
			Completed By		
			Lead hand / Supervisor Approval Verification		
			QC / QA Coordinator Approval		
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : ☐					

Picklist Print

Friday, February 17, 2017 1:31:05 PM

Page 1

Work Order ID: 157241

157241

Parent Item: D350-567-031

D350-567-031

Parent Item Name: Interior Window For -015 & -025

Start Date: 2/23/2017

Required Date: 3/9/2017

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP Rev:A new issue 08-04-25 DD verified by: LL
 IPP Rev:B 08-10-07 as per revD DD verified by: IPP REV:C
 13.10.15 AS PER IIN REV.E DD VERF:JLM IPP REV:D 16.04.25
 as per chg002 DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
AN3-4A *AN3-4A* Bolt		Purchased	No			120	Each	370.0000	4	4	DAS 6 9-89	MAR 21 2017	DAS 28 9-89
					<u>Location</u>			<u>Loc Qty</u>		<u>Loc Code</u>			
					ST350			370					
					m135704			37					
					m136579			333					
AN526C632R12 *AN526C632R12* Screw		Purchased	No			120	Each	157.0000	8	8	DAS 6 9-89	MAR 21 2017	DAS 28 9-89
					<u>Location</u>			<u>Loc Qty</u>		<u>Loc Code</u>			
					ST327			157					
					m135766			57					
					m136741			100					
D2463 *D2463* 1/2" Seal (\$ per foot)		Manufactured	No			120	f	370.3016	3.75	3.75	DAS 6 9-89	MAR 21 2017	DAS 28 9-89
					<u>Location</u>			<u>Loc Qty</u>		<u>Loc Code</u>			
					ST409			370.3016182					
					140013			3.9081E-05					
					148875			370.301579					

045

1 x 45"

5mp

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					

Root Cause				FAULT CATEGORY			
Environment ☐	☐ No Re-verification	☐ Pressure/Forced	☐ Temperature/Cure	☐ Power Loss/Surge	☐ Positioned Wrong		
Design ☐	☐ Operator	☐ Bending	☐ Set-up	☐ Folio/Program	☐ Outside Dimensions		
Doc/Data ☐	☐ Offset/Setup	☐ Centre Not Concentric	☐ BOM/Route	☐ Grain	☐ Over/Under tolerance		
Equip/Tooling ☐	☐ Supplier	☐ Cracks	☐ Broken/Damage/Defect	☐ Weld	☐ Part Incorrect		
Handling/Pre ☐	☐ Training	☐ Crimp/Kink/Ripple/Wave	☐ Inspection Incomplete/Unqualified	☐ Wrong Stock Pulled	☐ Part Lost/Missing		
Material ☐	☐ Use for Testing	☐ Cuffs	☐ Contamination	☐ Out of Sequence	☐ Part Moved		
Internal Transport ☐	☐ Poor Information	☐ Crushing	☐ Countersink	☐ Off-set	☐ Drawing		
Tribal Knowledge ☐	☐ Rushing	☐ Heat Treat	☐ Cut Too Short	☐ Mislabeled	☐ Finish		
LOA ☐	☐ Product Improvement	☐ Wave/Twist in Tube	☐ Instructions Incomplete/Unclear	☐ Fit/Function	☐ Misread		
Substation ☐	☐ Process Improvement	☐ Marks/Chatter	☐ Drill Holes	☐ Misaligned/off center	☐ Turning Sequence		
Past Expiry Date ☐	☐ Manufacturing Process	OTHER : _____					
Misidentified ☐	☐ Past Due						

Picklist Print

Friday, February 17, 2017 1:31:05 PM

Page 2

Work Order ID: 157241

157241

Parent Item: D350-567-031

D350-567-031

Parent Item Name: Interior Window For -015 & -025

Start Date: 2/23/2017

Required Date: 3/9/2017

Start Qty: 1.00

Required Qty: 1.00

D3210-1 Manufactured No

120

Each

4.0000

1

1

D3210-1

Doubler For Interior Window -015 & -025

**

DAS
6
9-89

DAS
28
9-89

MAR 21 2017

Location

Loc Qty

Loc Code

ST438

4

130478

4

D3211-1 Manufactured No

120

Each

7.0000

1

1

D3211-1

Bracket For Interior Window For -015 & -025

**

DAS
6
9-89

DAS
28
9-89

MAR 21 2017

Location

Loc Qty

Loc Code

ST438

7

142915

1

150490

6

D3212-1 Manufactured No

120

Each

6.0000

1

1

D3212-1

Replacement Interior Window For -015 & -025

**

DAS
6
9-89

DAS
28
9-89

MAR 21 2017

Location

Loc Qty

Loc Code

ST437

6

146040

2

154015

4

D3213-041 Manufactured No

120

Each

1.0000

1

1

D3213-041

Replacement Interior Door For -015 & -025

**

DAS
6
9-89

DAS
28
9-89

MAR 21 2017

Location

Loc Qty

Loc Code

ST437

1

134574

1

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
				Completed By					
				Lead hand / Supervisor Approval Verification					
				QC / QA Coordinator Approval					

Root Cause				FAULT CATEGORY			
Environment ☐	☐ No Re-verification	☐ Pressure/Forced	☐ Temperature/Cure	☐ Power Loss/Surge	☐ Positioned Wrong		
Design ☐	☐ Operator	☐ Bending	☐ Set-up	☐ Folio/Program	☐ Outside Dimensions		
Doc/Data ☐	☐ Offset/Setup	☐ Centre Not Concentric	☐ BOM/Route	☐ Grain	☐ Over/Under tolerance		
Equip/Tooling ☐	☐ Supplier	☐ Cracks	☐ Broken/Damage/Defect	☐ Weld	☐ Part Incorrect		
Handling/Pre ☐	☐ Training	☐ Crimp/Kink/Ripple/Wave	☐ Inspection Incomplete/Unqualified	☐ Wrong Stock Pulled	☐ Part Lost/Missing		
Material ☐	☐ Use for Testing	☐ Cuffs	☐ Contamination	☐ Out of Sequence	☐ Part Moved		
Internal Transport ☐	☐ Poor Information	☐ Crushing	☐ Countersink	☐ Off-set	☐ Drawing		
Tribal Knowledge ☐	☐ Rushing	☐ Heat Treat	☐ Cut Too Short	☐ Mislabeled	☐ Finish		
LOA ☐	☐ Product Improvement	☐ Wave/Twist in Tube	☐ Instructions Incomplete/Unclear	☐ Fit/Function	☐ Misread		
Substation ☐	☐ Process Improvement	☐ Marks/Chatter	☐ Drill Holes	☐ Misaligned/off center	☐ Turning Sequence		
Past Expiry Date ☐	☐ Manufacturing Process	OTHER : _____					
Misidentified ☐	☐ Past Due						

Picklist Print

Friday, February 17, 2017 1:31:05 PM

Page 3

Work Order ID: 157241

157241

Parent Item: D350-567-031

D350-567-031

Parent Item Name: Interior Window For -015 & -025

Start Date: 2/23/2017

Required Date: 3/9/2017

Start Qty: 1.00

Required Qty: 1.00

D5420-1

Manufactured No

120

Each

12.0000

1

1

D5420-1

Doubler Plate

DAS
6
9-89

MAR 21 2017

DAS
28
9-89

Location

Loc Qty

Loc Code

prelim

1

144528

1

ST168

11

151543

11

MS20426AD3-5

Purchased

No

120

Each

3,550.000

8

8

MS20426AD3-5

Rivet

DAS
6
9-89

MAR 21 2017

DAS
28
9-89

Location

Loc Qty

Loc Code

GA

2344

4533

2344

ST312

1206

4533

1206

MS20470AD4-5

Purchased

No

120

Each

2,506.000

40

40

MS20470AD4-5

RIVET, UNIVERSAL HEAD

DAS
6
9-89

MAR 21 2017

DAS
28
9-89

Location

Loc Qty

Loc Code

CCK004

1782

m136851

1782

GA

4

m133860

4

ST310

720

m134654

720

Friday, February 17, 2017 1:31:05 PM

Shop Packet Print

Page 3

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					

Root Cause			FAULT CATEGORY			
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐	
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____				
Misidentified ☐	Past Due ☐					

Picklist Print

Friday, February 17, 2017 1:31:05 PM

Page 4

Work Order ID: 157241

157241

Parent Item: D350-567-031

D350-567-031

Parent Item Name: Interior Window For -015 & -025

Start Date: 2/23/2017

Required Date: 3/9/2017

Start Qty: 1.00

Required Qty: 1.00

MS20470AD4-6

Purchased

No

120

Each

2,164.000

90

90

MS20470AD4-6

Rivet, Universal Head

DAS
27
9-89

Location

Loc Qty

Loc Code

CCK004

1566

m136787

1566

GA

376

m133077

376

ST310

222

m134852

222

MS20470AD4-7

Purchased

No

120

Each

1,860.000

20

20

MS20470AD4-7

Rivet, Universal Head

**

DAS
27
9-89

Location

Loc Qty

Loc Code

CCK004

1821.604

m134376

1396

m134630

425.604

LG001

1.396

m134630

1.396

ST310

37

m132536

37

MS21042L06

Purchased

No

120

Each

165.0000

8

8

MS21042L06

Nut

DAS
27
9-89

Location

Loc Qty

Loc Code

ST303

165

m136643

65

m136741

100

DAS
6
9-89

MAR 21 2017

DAS
28
9-89

DAS
6
9-89

MAR 21 2017

DAS
28
9-89

DAS
6
9-89

MAR 21 2017

DAS
28
9-89

Friday, February 17, 2017 1:31:05 PM

Shop Packet Print

Page 4

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐								
Misidentified ☐	Past Due ☐	OTHER : _____							

Picklist Print

Friday, February 17, 2017 1:31:05 PM

Page 5

Work Order ID: 157241

157241

Parent Item: D350-567-031

D350-567-031

Parent Item Name: Interior Window For -015 & -025

Start Date: 2/23/2017

Required Date: 3/9/2017

Start Qty: 1.00

Required Qty: 1.00

MS21062L3 Purchased No 120 Each 22.0000 4

MS21062L3

Nut Plate

**

4

DAS
6
9-89

MAR 21 2017

DAS
28
9-89

Location

Loc Qty

Loc Code

ST300

22

m135043

12

m136787

10

NAS1149DN632J Purchased No 120 Each 338.0000 8

NAS1149DN632J

Washer

**

8

DAS
6
9-89

MAR 21 2017

DAS
28
9-89

Location

Loc Qty

Loc Code

ST265

338

m134370

338

DAS
27
9-89

8

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By _____ Lead hand / Supervisor Approval Verification _____ QC / QA Coordinator Approval _____		
Description Work Order Deviation				Disposition					

Root Cause				FAULT CATEGORY			
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐		
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐		
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐		
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐		
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐		
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐		
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐		
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐		
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐		
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐		
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____					
Misidentified ☐	Past Due ☐						

DART SERVICE INSTRUCTION

TO AMEND INSTALLATION INSTRUCTIONS D350-567 REV. E
AND INSTRUCTIONS FOR CONTINUED AIRWORTHINESS ICA-D350-567 REV. 2

REF. TCCA STC: SH92-18

REF. FAA STC: SH989NE AND SH990NE

REF. EASA STC: EASA.IM.R.S.01560 AND EASA.IM.R.S.01561

NO. 157241 MTS
14-02-22
UNCONTROLLED COPY
ENGINEERING
RETURN TO
SHOP COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER

PURPOSE:

To provide a new location for the cabin fire extinguisher for aircraft equipped with P/N 19810-02-00 (SICMA-198 Seat). For further information on SICMA-198 Seats refer to Airbus CMM 25-12-31.

CHANGE:

For aircraft equipped with P/N 19810-02-00 (SICMA-198 Seat) add section 3.2.3, amend section 5.0 Parts List (ICA Section 25.7) and amend section 4.0 Weight and Balance (ICA Section 25.5) of Vertical Reference Window Installation Instructions D350-567 Rev. E (ICA D350-567 Rev. 2) as follows:

(ADD) 3.2.3 This installation will require access to the under floor structure in the area aft of the pilot's collective stick. To access the under floor structure remove the applicable belly panel in accordance with the applicable Aircraft Maintenance Manual.

Remove and retain the cabin fire extinguisher P/N 1708337 B4 and Fire Extinguisher Support P/N 350A77 0131 40 from existing location. Per Figure 1, select the desired location for the fire extinguisher at either the "Primary" location or "Alternate" location.

Locate the D5420-1 Doubler Plate at the selected location per Figure 1 and transfer mark the holes from the D5420-1 Doubler Plate to the aircraft floor. Drill the nutplate hole pattern shown in Detail A. Touch up the drilled floor surface finish with chemical film (Alodine 1200/1201) per MIL-C-5541 and one coat of MIL-P-85582 or MIL-P-23377 primer.

Locate the D5420-1 Doubler Plate under the floor and install using qty (4) MS21062L3 nutplates and qty (8) MS20426AD3-5 Rivets (rivets fasten through floor and doubler). Locate the Fire Extinguisher Support P/N 350A77 0131 40 over the drilled holes and fasten it to the qty (4) MS21062L3 nutplates using qty (4) AN3-3A Bolts. Torque bolts 20-25 in-lbs (2.3-2.8 N-m). Reinstall the P/N 1708337 Fire Extinguisher per the Aircraft Maintenance Manual.

Reinstall the belly panel per the applicable Aircraft Maintenance Manual.

CHANGE:

Amend Section 25.6 Equipment relocation of ICA D350-567 Rev. 2 as follows:

25.6 EQUIPMENT RELOCATION

(IS) As part of the D350-567 kit installation, the aircraft data plate may have been relocated beneath the RH pilot's seat and the fire extinguisher may have been relocated to the LH side of the pilot's seat per Eurocopter Service Bulletin 25.00.59. See also Dart Drawing D350-567.

Depending on the Aircraft's seating configuration the fire extinguisher may have to be relocated to the LH side of the pilot's seat per Eurocopter Service Bulletin 25.00.59, or relocated to the cabin floor per Dart DSI 9745. See also Dart Drawing D350-567.

(WAS) As part of the D350-567 kit installation, the aircraft data plate may have been relocated beneath the RH pilot's seat and the fire extinguisher may have been relocated to the LH side of the pilot's seat per Eurocopter Service Bulletin 25.00.59. See also Dart Drawing D350-567.

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED
BY: 
D. SHEPHERD (DE # 02)

DATE: 16.04.06
CERT. NO.: SH92-18
ISSUE NO.: 6

A	NEW ISSUE (SEE PAR 16-510)	AJS	16.04.06
REV.	DESCRIPTION	BY	DATE
DESIGN	AJS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS		
CHECKED	J	DRAWING NO.	REV. A
MFG. APPR.	N/A	DSI 9745	SHEET 1 OF 3
APPROVED	CM	TITLE	SCALE
DE APPR.	SA	ALTERNATE FIRE EX LOCATION	NTS
DATE	16.04.06	COPYRIGHT © 2016 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSES OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

EDIT 5.0/25.7 PARTS LIST:

For customers with kits D350-567-013/-015/-017/-023/-025/-027/-117 @ CHG002 and earlier,
Customers with kits D350-567-111 @ CHG006 and earlier,
Customers with kits D350-567-115 @ CHG004 and earlier,
Customers with kits D350-567-031/-031B/-111B/-115B @ CHG001 and earlier,
Procure kit DSI 9745-011

Item	Qty -011	Part Number	Description
	X	DSI 9745-011	FIRE EXTINGUISHER RELOCATION KIT
1	1	D5420-1	DOUBLER PLATE
2	4	AN3-4A	HEX HEAD BOLT
3	8	MS20426AD3-5	CSK RIVET
4	4	MS21062L3	NUTPLATE

For customers with kits D350-567-013/-015/-017/-023/-025/117 @ CHG003 and later,
Customers with kits D350-567-111 @ CHG007 and later,
Customers with kits D350-567-115 @ CHG005 and later,
Customers with kits D350-567-031/-031B/-111B/-115B @ CHG002 and later,
Refer to Installation Instructions D350-567 and ICA-D350-567 and update the parts list as follows:

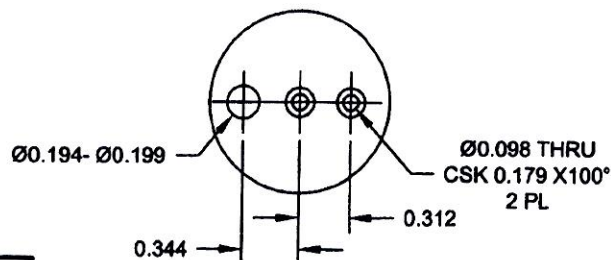
EDIT 5.0 ADD:

Qty -013	Qty -023	Qty -113	Qty -115	Qty -031	Part Number	Description
X					D350-567-013	REPLACEMENT WINDOW KIT (SMALL)
	X				D350-567-023	REPLACEMENT WINDOW KIT (LARGE)
		X			D350-567-113	REPLACEMENT WINDOW KIT (EXTRA LARGE)
			X		D350-567-115	INTERIOR FLOOR WINDOW KIT
				X	D350-567-031	INTERIOR FLOOR WINDOW KIT (SLIDING DOOR COMPATABLE)
			1	1	D5420-1	DOUBLER PLATE
			4	4	AN3-4A	HEX HEAD BOLT
			8	8	MS20426AD3-5	CSK RIVET
			4	4	MS21062L3	NUTPLATE

EDIT 4.0/25.5 WEIGHT AND BALANCE:

*Note: Does not include fire extinguisher weight

Installation	Weight	LATERAL		LONGITUDINAL	
		Arm	Moment	Arm	Moment
DSI 9745-011 (Primary Location)	0.1 lb	+1.6 in	+16 in lb	72.2 in	7.2 in lb
Fire Extinguisher Relocation Kit	0.05 kg	+0.04 m	+0.02 m kg	1.83 m	0.1 m kg
DSI 9745-011 (Alternate location)	0.1 lb	-4.4 in	-44 in lb	65.4 in	6.5 in lb
Fire Extinguisher Relocation Kit	0.05 kg	-0.11 m	-0.01 m kg	1.66 m	0.1 m kg

**DETAIL A**

(NUT PLATE HOLE PATTERN)

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED

BY: D. SHEPHERD (DE # 02)

DATE: 16.04.06

CERT. NO.: SH92-18

ISSUE NO.: 6

DESIGN	AJS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA
DRAWN	AJS	
CHECKED		DRAWING NO. REV. A
MFG. APPR.	N/A	DSI 9745 SHEET 2 OF 3
APPROVED		TITLE SCALE
DE APPR.		ALTERNATE FIRE EX LOCATION NTS
DATE	16.04.06	COPYRIGHT © 2016 BY DART AEROSPACE LTD
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.		

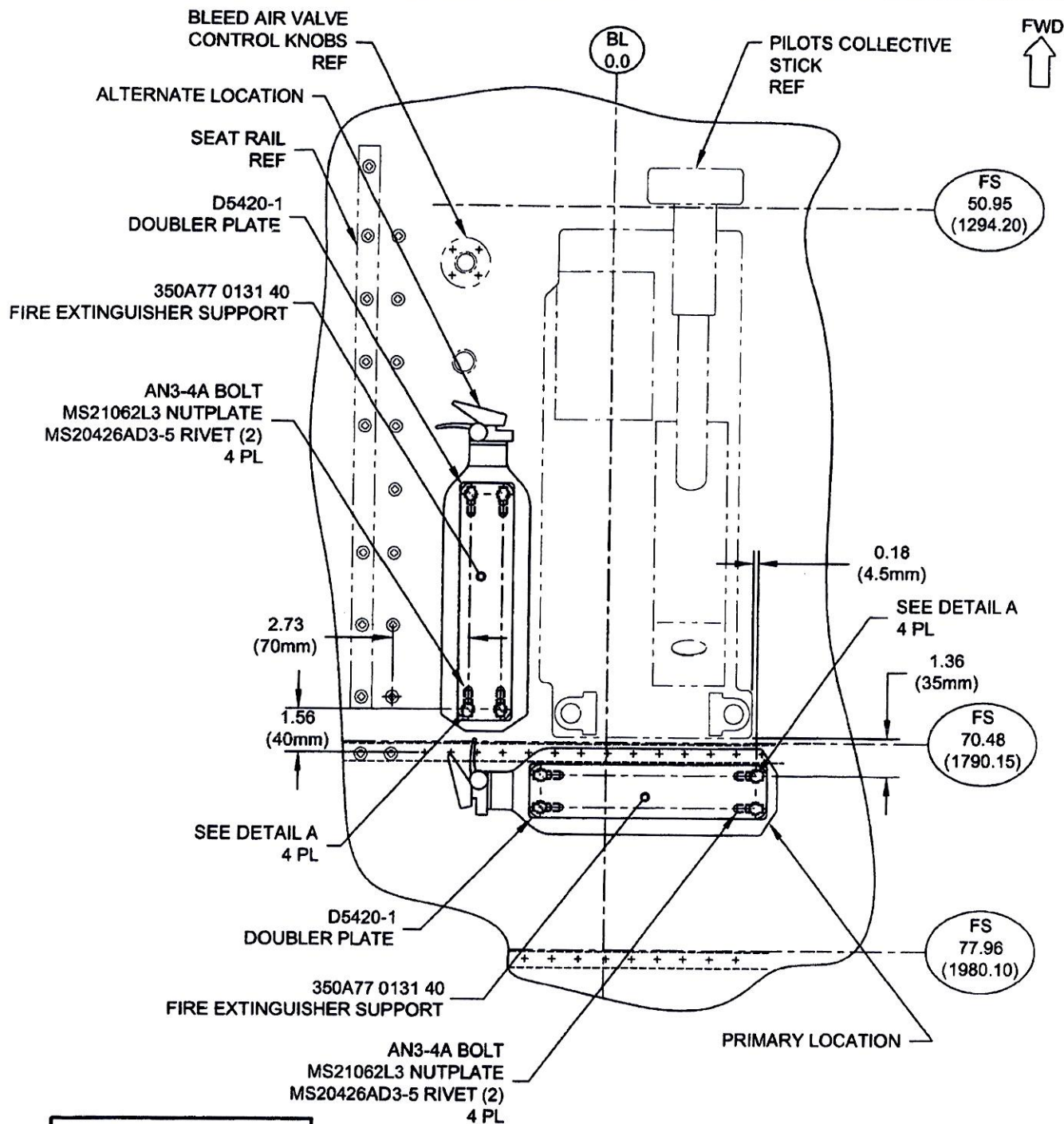


FIGURE 1

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED
BY: *[Signature]*
D. SHEPHERD (DE # 02)
DATE: 16.04.06
CERT. NO.: SH92-18
ISSUE NO.: 6

DESIGN	AJS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS		
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. A
MFG. APPR.	N/A	DSI 9745	SHEET 3 OF 3
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	ALTERNATE FIRE EX LOCATION	NTS
DATE	16.04.06	COPYRIGHT © 2016 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

5.0 PARTS LIST

Qty -015	Qty -017	Qty -025	Qty -027	Qty -111	Qty -117	Part Number	Description
X						D350-567-015	FLOOR WINDOW INSTALLATION (SMALL)
	X					D350-567-017	FLOOR WINDOW INSTALLATION (SMALL)
		X				D350-567-025	FLOOR WINDOW INSTALLATION (LARGE)
			X			D350-567-027	FLOOR WINDOW INSTALLATION (LARGE)
				X		D350-567-111	FLOOR WINDOW INSTALLATION (EXTRA LARGE)
					X	D350-567-117	FLOOR WINDOW INSTALLATION (EXTRA LARGE)
1	1					D350-567-013	REPLACEMENT WINDOW KIT (SMALL)
		1	1			D350-567-023	REPLACEMENT WINDOW KIT (LARGE)
				1	1	D350-567-113	REPLACEMENT WINDOW KIT (EXTRA LARGE)
	1		1	1		D350-567-115	INTERIOR FLOOR WINDOW KIT
1		1			1	D350-567-031	INTERIOR FLOOR WINDOW KIT (SLIDING DOOR COMPATABLE)

Qty -013	Qty -023	Qty -113	Qty -115	Qty -031	Part Number	Description
X					D350-567-013	REPLACEMENT WINDOW KIT (SMALL)
	X				D350-567-023	REPLACEMENT WINDOW KIT (LARGE)
		X			D350-567-113	REPLACEMENT WINDOW KIT (EXTRA LARGE)
			X		D350-567-115	INTERIOR FLOOR WINDOW KIT
				X	D350-567-031	INTERIOR FLOOR WINDOW KIT (SLIDING DOOR COMPATABLE)
1					D2125	REPLACEMENT WINDOW, SMALL
	1				D2942	REPLACEMENT WINDOW, LARGE
		1			D3290-041	REPLACEMENT WINDOW ASSEMBLY, EXTRA LARGE
1					D2126-0600	SEAL
	1				D2463-0750	NEOPRENE SEAL
		1			D2463-0860	NEOPRENE SEAL
	9	12			2600-6	1/4 TURN FASTENER
	9	12			2600-LW	WASHER
	9	12			212-12	RECEPTACLE
	22	21			AN526C832R9	SCREW (OR AN526C832-9, OR MS51957-126)
	44	42			AN960JD8	WASHER
	22	21			MS21042L08	NUT (OR MS21042-08)
	18	24			MS20426AD3-5	RIVET
2 SQ. YD	2 SQ. YD	2 SQ. YD			N/A	9.7oz 7781 'S' GLASS UNIVERSAL WEAVE
				1	D2463-0450	NEOPRENE SEAL
				1	D3210-1	DOUBLER
				1	D3211-1	BRACKET
				1	D3212-1	FLOOR WINDOW
				1	D3213-041	DOOR ASSEMBLY
			1		D3293-1	DOUBLER
			1		D3294-1	BRACKET
			1		D3295-041	FLOOR WINDOW
			1		D3296-041	DOOR ASSEMBLY
			1		D2463-0530	NEOPRENE SEAL
			9	8	AN526C632R12	SCREW (OR AN526C632-12, OR MS51957-32)
			9	8	AN960JD6	WASHER
			9	8	MS21042L06	NUT (OR MS21042-06)
			2	40	MS20470AD4-5	RIVET
			115	90	MS20470AD4-6	RIVET
			15	20	MS20470AD4-7	RIVET

EDIT 5.0/25.7 PARTS LIST:

For customers with kits D350-567-013/-015/-017/-023/-025/-027/-117 @ CHG002 and earlier,
 Customers with kits D350-567-111 @ CHG006 and earlier,
 Customers with kits D350-567-115 @ CHG004 and earlier,
 Customers with kits D350-567-031/-031B/-111B/-115B @ CHG001 and earlier,
 Procure kit DSI 9745-011

Item	Qty -011	Part Number	Description
	X	DSI 9745-011	FIRE EXTINGUISHER RELOCATION KIT
1	1	D5420-1	DOUBLER PLATE
2	4	AN3-4A	HEX HEAD BOLT
3	8	MS20426AD3-5	CSK RIVET
4	4	MS21062L3	NUTPLATE

For customers with kits D350-567-013/-015/-017/-023/-025/117 @ CHG003 and later,
 Customers with kits D350-567-111 @ CHG007 and later,
 Customers with kits D350-567-115 @ CHG005 and later,
 Customers with kits D350-567-031/-031B/-111B/-115B @ CHG002 and later,
 Refer to Installation Instructions D350-567 and ICA-D350-567 and update the parts list as follows:

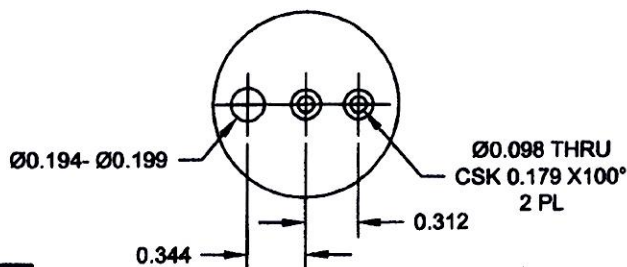
EDIT 5.0 ADD:

Qty -013	Qty -023	Qty -113	Qty -115	Qty -031	Part Number	Description
X					D350-567-013	REPLACEMENT WINDOW KIT (SMALL)
	X				D350-567-023	REPLACEMENT WINDOW KIT (LARGE)
		X			D350-567-113	REPLACEMENT WINDOW KIT (EXTRA LARGE)
			X		D350-567-115	INTERIOR FLOOR WINDOW KIT
				X	D350-567-031	INTERIOR FLOOR WINDOW KIT (SLIDING DOOR COMPATABLE)
			1	1	D5420-1	DOUBLER PLATE
			4	4	AN3-4A	HEX HEAD BOLT
			8	8	MS20426AD3-5	CSK RIVET
			4	4	MS21062L3	NUTPLATE

EDIT 4.0/25.5 WEIGHT AND BALANCE:

*Note: Does not include fire extinguisher weight

Installation	Weight	LATERAL		LONGITUDINAL	
		Arm	Moment	Arm	Moment
DSI 9745-011 (Primary Location)	0.1 lb	+1.6 in	+16 in lb	72.2 in	7.2 in lb
Fire Extinguisher Relocation Kit	0.05 kg	+0.04 m	+0.02 m kg	1.83 m	0.1 m kg
DSI 9745-011 (Alternate location)	0.1 lb	-4.4 in	-44 in lb	65.4 in	6.5 in lb
Fire Extinguisher Relocation Kit	0.05 kg	-0.11 m	-0.01 m kg	1.66 m	0.1 m kg



DETAIL A

(NUT PLATE HOLE PATTERN)

CANADA
 DEPARTMENT OF TRANSPORT
 AIRCRAFT CERTIFICATION
 BRANCH
 DAO # 01-O-01

APPROVED

BY: D. SHEPHERD (DE # 02)

DATE: 16.04.06

CERT. NO.: SH92-18

ISSUE NO.: 6

DESIGN	AJS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA
DRAWN	AJS	
CHECKED		DRAWING NO. REV. A
MFG. APPR.	N/A	DSI 9745 SHEET 2 OF 3
APPROVED		TITLE SCALE
DE APPR.		ALTERNATE FIRE EX LOCATION NTS
DATE	16.04.06	COPYRIGHT © 2016 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.